

USPTO Customer No. 25280

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CENTRAL FAX CENTER Case 9236A
MAR 05 2009

AMENDMENTS TO THE CLAIMS

1 – 31. (Cancelled)

32. (Currently amended) A method of making a floor mat with a tufted pile textile surface and an elastomer backing, the method comprising the steps of (a) mixing elastomer crumbs and a binder, (b) depositing the crumb/binder mixture to form a crumb/binder layer, (c) placing a textile surface element comprising tufts of yarn tufted into a tufting substrate on the crumb/binder layer to form a mat assembly, (d) pressing the mat assembly in a heated press, the heated press having an inflatable diaphragm and a single heated platen having a plurality of zones, a first zone being a low temperature zone and a second zone being a higher temperature zone, said pressing step being used to set the binder, thereby consolidating the elastomer crumbs comprising the crumb/binder layer to form an elastomer backing that includes voids between the elastomer crumbs, and bonding the textile surface element to the elastomer backing, wherein the mat assembly is pressed at a pressure in the range 2-8 psig (14-55 kPa) and is heated at a maximum temperature of 200°C or less to form an elastomer backing with a density in the range 0.5 to 0.9g/cm³, wherein the elastomer backing thickness has a deformability of about 14-50 25% when the thickness is measured after application of 60g weight and a 800g weight are applied to the backing with a 10mm diameter foot, wherein the mat assembly is pressed in a plurality of stages, wherein the thickness of the elastomer backing comprising the mat assembly is within the range of 60 to 100% of the thickness of the unpressed crumb/binder layer, wherein the mat assembly is transported through the press on a conveyor, and wherein the crumb/binder mixture is deposited on the conveyor using a spreader device that moves at a constant speed relative to the conveyor.

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33. (Cancelled)
34. (Previously presented) A method according to claim 32, wherein the thickness of the elastomer backing comprising the mat assembly is within the range of 65 to 85% of the thickness of the unpressed crumb/binder layer.
35. (Previously presented) A method according to claim 32 wherein the mat assembly is pressed at a maximum temperature in the range 110°C to 140°C.
36. (Previously presented) A method according to claim 32 wherein the mat assembly is pressed at a maximum temperature of about 125°C.
37. (Cancelled)
38. (Cancelled)
39. (Cancelled)
40. (Previously presented) A method according to claim 32 wherein the binder is selected from the group comprising thermosetting and water curable polymeric materials and mixtures thereof, and the mat assembly is pressed in a plurality of stages including at least one low temperature stage followed by at least one higher temperature stage.

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41. (Previously presented) A method according to claim 32 wherein the binder is selected from the group comprising thermoplastic polymeric materials, hot melt binders and mixtures thereof, and the mat assembly is pressed in a plurality of stages including at least one high temperature stage followed by at least one lower temperature stage.
42. (Cancelled)
43. (Previously presented) A method according to claim 32 wherein the mat assembly is transported through the press in a plurality of steps, so that it is pressed sequentially in each of the plurality of zones.
44. (Cancelled)
45. (Previously presented) A method according to claim 32 wherein the spreader device includes a vibrating doctor blade.
46. (Previously presented) A method according to claim 32 wherein the textile surface element placed on the crumb/binder layer is a continuous textile surface element.
47. (Cancelled)

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48. (Previously presented) A method according to claim 32 wherein separate textile surface elements are laid consecutively on the crumb/binder layer.

49. (Previously presented) A method according to claim 32 wherein mat borders are produced by spreading the crumb/binder mixture over a larger area than the textile element or elements.

50. (Previously presented) A method according to claim 32 wherein the elastomer crumb is crumbed vulcanized rubber.

51. (Previously presented) A method according to claim 32 wherein that the elastomer backing has a bulk density in the range 45 to 70% of the solid density of the elastomer crumb material.

52. (Previously presented) A method according to claim 32 wherein the elastomer crumb is crumbed vulcanized nitrile rubber and the elastomer backing has a bulk density in the range 45 to 70% of the solid density of the elastomer crumb material.

53. (Cancelled)

54. (Previously presented) A method according to claim 52 wherein the elastomer backing has a density in the range of from 0.7 g/cm³ to 0.9 g/cm³.

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55. (Previously presented) A method according to claim 52 wherein the elastomer backing has a bulk density in the range 55 to 70% of the solid density of the elastomer crumb material.
56. (Cancelled)
57. (Previously presented) A method according to claim 33 wherein the elastomer backing has a thickness of at least 1 mm.
58. (Cancelled)
59. (Previously presented) A method according to claim 52 wherein the crumb size is substantially in the range of 2 to 4 mm.
60. (Previously presented) A method according to claim 32 wherein the crumb/binder mixture includes at least 10% by weight powdered elastomer crumb.
61. (Previously presented) A method according to claim 32 wherein the crumb/binder mixture includes less than 1% by weight powdered elastomer crumb and from 2 to 12% of binder.
62. (Previously presented) A method according to claim 32 wherein the crumb/binder mixture includes from 2 to 20% by weight of binder.

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63. (Previously presented) A method according to claim 55 wherein the Crumb/binder mixture includes at least 10% by weight powdered elastomer crumb and from 9 to 20% binder.
64. (Cancelled)
65. (Previously presented) A method according to claim 32 wherein the binder is a polyurethane MDI binder.
66. (Previously presented) A method according to claim 65 in which the binder is selected from the group consisting of (i) a 4,4-methylene di-p-phenylene isocyanate (MDI) polyurethane one-component adhesive and (ii) a 4,4-methylene di-p-phenylene isocyanate (MDI) polyurethane two-component adhesive.
67. (Previously presented) A method according to claim 65 in which the binder is a solvent-free one component polyurethane adhesive.
68. (Previously presented) A method according to claim 32 wherein the binder is a hot melt binder.
69. (Previously presented) A method according to claim 32 wherein the crumb/binder mixture includes powdered additives selected from the group consisting of anti microbial additives, anti-flammability additives, pigments, and anti-static additives.

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70. (Cancelled)

71. (Previously presented) A method according to claim 32 wherein an edging strip is bonded to the elastomer backing adjacent at least one edge thereof.

72. (Previously presented) A method according to claim 71 wherein the textile surface element partially overlaps and is bonded to the edging strip.

SUMAMRY OF REJECTION

1. Claims 32-36, 40, 41, 43, 45, 46, 48-52, 54, 55, 57, 59-63, 64-69, 71 and 72 were rejected under 35 USC 112, first paragraph
2. Claims 32-36, 41, 41, 43, 45, 46, 48-52, 54, 55, 57, 59-63, 64-69, 71, and 72 were rejected under 35 USC 112, first paragraph.
3. Claims 32-36, 40, 41, 43, 45, 46, 48-52, 54, 55, 57, 59-63, 64-69, 71 and 72 were rejected under 35 USC 103(a)
4. Claims 48, 49, 71, and 72 were rejected under 35 USC 102(a).